BRIAR

BIOMETRIC RECOGNITION AND IDENTIFICATION AT ALTITUDE AND RANGE

INTELLIGENCE VALUE

The BRIAR program aims to provide the U.S. Intelligence Community with the ability to perform accurate and reliable biometric identity intelligence across a wider range of imagery and collected from a wider selection of sensor platforms.

The BRIAR program began in November 2021, with the goal of developing software algorithm-based systems capable of performing whole-body biometric identification at long-range and from elevated platforms. Many Intelligence Community (IC) agencies require the ability to identify or recognize individuals under challenging scenarios, such as at long-range (e.g., 300+ meters), through atmospheric turbulence, or from elevated and/or aerial sensor platforms (e.g., ≥20° sensor view angle from watchtowers or unmanned aerial vehicles).

The BRIAR program is a 48-month effort to deliver end-to-end software systems capable of detecting and tracking individuals at these severe imaging conditions, extracting biometric signatures from the whole-body (e.g., gait and/or body shape) and face, and fusing biometric information for robust multi-modal matching. Research outcomes from the BRIAR Program are intended to support missions such as counterterrorism, protection of critical infrastructure and transportation facilities, military force protection, and border security.

PRIME PERFORMERS

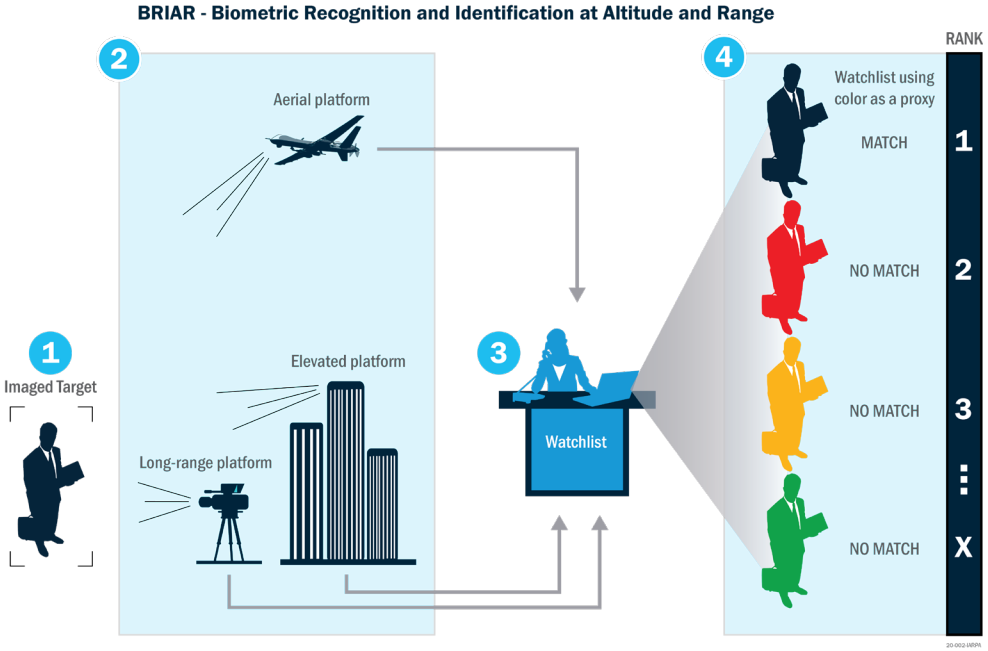
- Accenture Federal Services
- Intelligent Automation
- Kitware
- Michigan State University
- Systems & Technology Research
- University of Houston
- University of Southern California
- Carnegie Mellon University (focused research)
- GE Research (focused research)

TESTING AND EVALUATION PARTNERS

- Oak Ridge National Laboratory
- National Institute of Standards and Technology
- U.S. Army C5ISR Center, Research and Technology Innovation Directorate
- Army Research Laboratory

KEYWORDS

- Biometrics
- Atmospheric turbulence
- Long-range
- Unmanned aerial vehicles
- Machine learning
- Algorithms
- Face recognition
- Whole-body recognition
- Gait recognition



The BRIAR program aims to develop software algorithms to expand the types of imagery and missions to perform accurate and reliable whole-body biometric recognition.

BRIAR

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